

142.US5.REG

PATENT

WHAT IS CLAIMED IS:

- 1 1. An isolated polynucleotide, comprising a nucleic acid sequence selected from the group
2 consisting of:
- 3 a) a polynucleotide of an odd SEQ ID NO. 1-15, 21-27, 31-51, or of a human cDNA of
4 a deposited clone, encoding at least any single integer from 6 to 776 amino acids of
5 any one even SEQ ID NO. 2-16, 22-28, 32-52,
 - 6 b) a polynucleotide of an odd SEQ ID NO. 1-15, 21-27, 31-51, or of a human cDNA of
7 a deposited clone, encoding the signal peptide sequence of any one even SEQ ID
8 NO. 2-16, 22-28, 32-52,
 - 9 c) a polynucleotide of an odd SEQ ID NO. 1-15, 21-27, 31-51, or of a human cDNA of
10 a deposited clone, encoding a mature polypeptide sequence of any one even SEQ ID
11 NO. 2-16, 22-28, 32-52,
 - 12 d) a polynucleotide of an odd SEQ ID NO. 1-15, 21-27, 31-51, or of a human cDNA of
13 a deposited clone, encoding a full length polypeptide sequence of any one even SEQ
14 ID NO. 2-16, 22-28, 32-52,
 - 15 e) a polynucleotide of an odd SEQ ID NO. 1-15, 21-27, 31-51, or of a human cDNA of
16 a deposited clone, encoding a polypeptide sequence of a biologically active
17 fragment of any one even SEQ ID NO. 2-16, 22-28, 32-52,
 - 18 f) a polynucleotide encoding a polypeptide sequence of at least any single integer from
19 6 to 776 amino acids of any one even SEQ ID NO. 2-16, 22-28, 32-52 or of a
20 polypeptide encoded by a human cDNA of a deposited clone,
 - 21 g) a polynucleotide encoding a polypeptide sequence of a signal peptide of any one
22 even SEQ ID NO. 2-16, 22-28, 32-52 or of a signal peptide encoded by a human
23 cDNA of a deposited clone,
 - 24 h) a polynucleotide encoding a polypeptide sequence of a mature polypeptide of any
25 one even SEQ ID NO. 2-16, 22-28, 32-52 or of a mature polypeptide encoded by a
26 human cDNA of a deposited clone,
 - 27 i) a polynucleotide encoding a polypeptide sequence of a full length polypeptide of
28 any one even SEQ ID NO. 2-16, 22-28, 32-52 or of a mature polypeptide encoded
29 by a human cDNA of a deposited clone,
 - 30 j) a polynucleotide encoding a polypeptide sequence of a biologically polypeptide of
31 any one even SEQ ID NO. 2-16, 22-28, 32-52, or of a biologically polypeptide
32 encoded by a human cDNA of a deposited clone,
 - 33 k) a polynucleotide of any one of a) through j) further comprising an expression
34 vector,

- 35 l) a host cell recombinant for a polynucleotide of a) through k) above,
36 m) a non-human transgenic animal comprising the host cell of k),
37 n) a polynucleotide of a) through j) further comprising a physiologically acceptable
38 carrier.

- 1 2. A polypeptide comprising an amino acid sequence selected from the group consisting of:
2 a) any single integer from 6 to 776 amino acids of any one even SEQ ID NO. 2-16, 22-
3 28, 32-52 or of a polypeptide encoded by a human cDNA of a deposited clone;
4 b) a signal peptide sequence of any one even SEQ ID NO. 2-16, 22-28, 32-52 or
5 encoded by a human cDNA of a deposited clone;
6 c) a mature polypeptide sequence of any one even SEQ ID NO. 2-16, 22-28, 32-52 or
7 encoded by a human cDNA of a deposited clone;
8 d) a full length polypeptide sequence of any one even SEQ ID NO. 2-16, 22-28, 32-52
9 or encoded by a human cDNA of a deposited clone;
10 e) a polypeptide of a) through d) further comprising a physiologically acceptable
11 carrier.

- 1 3. A method of making a polypeptide, said method comprising
2 a) providing a population of host cells comprising the polynucleotide of claim 1;
3 b) culturing said population of host cells under conditions conducive to the production
4 of a polypeptide of claim 2 within said host cells; and
5 c) purifying said polypeptide from said population of host cells.

- 1 4. A method of making a polypeptide, said method comprising:
2 a) providing a population of cells comprising a polynucleotide encoding the
3 polypeptide of claim 2, operably linked to a promoter;
4 b) culturing said population of cells under conditions conducive to the production of
5 said polypeptide within said cells; and
6 c) purifying said polypeptide from said population of cells.

1 5. An antibody that specifically binds to the polypeptide of claim 2.

1 6. A method of binding a polypeptide of claim 2 to an antibody of claim 5, comprising
2 contacting said antibody with said polypeptide under conditions in which antibody can specifically
3 bind to said polypeptide.

1 7. A method of determining whether a GENSET gene is expressed within a mammal, said
2 method comprising the steps of:

3 a) providing a biological sample from said mammal

4 b) contacting said biological sample with either of:

5 i) a polynucleotide that hybridizes under stringent conditions to the
6 polynucleotide of claim 1; or

7 ii) a polypeptide that specifically binds to the polypeptide of claim 2; and

8 c) detecting the presence or absence of hybridization between said polynucleotide and
9 an RNA species within said sample, or the presence or absence of binding of said
10 polypeptide to a protein within said sample;

11 wherein a detection of said hybridization or of said binding indicates that said GENSET gene is
12 expressed within said mammal.

1 8. The method of claim 7, wherein said polynucleotide is a primer, and wherein said
2 hybridization is detected by detecting the presence of an amplification product comprising the
3 sequence of said primer.

1 9. The method of claim 7, wherein said polypeptide is an antibody.

1 10. A method of determining whether a mammal has an elevated or reduced level of GENSET
2 gene expression, said method comprising the steps of:

3 a) providing a biological sample from said mammal; and

4 b) comparing the amount of the polypeptide of claim 2, or of an RNA species
5 encoding said polypeptide, within said biological sample with a level detected in or
6 expected from a control sample;

7 wherein an increased amount of said polypeptide or said RNA species within said biological sample
8 compared to said level detected in or expected from said control sample indicates that said mammal
9 has an elevated level of said GENSET gene expression, and wherein a decreased amount of said
10 polypeptide or said RNA species within said biological sample compared to said level detected in or
11 expected from said control sample indicates that said mammal has a reduced level of said GENSET
12 gene expression.

1 11. A method of identifying a candidate modulator of a GENSET polypeptide, said method
2 comprising:

- 3 a) contacting the polypeptide of claim 2 with a test compound; and
- 4 b) determining whether said compound specifically binds to said polypeptide;

5 wherein a detection that said compound specifically binds to said polypeptide indicates that said
6 compound is a candidate modulator of said GENSET polypeptide.

1 12. The method of claim 11, further comprising testing the biological activity of said GENSET
2 polypeptide in the presence of said candidate modulator, wherein an alteration in the biological
3 activity of said GENSET polypeptide in the presence of said compound in comparison to the activity
4 in the absence of said compound indicates that the compound is a modulator of said GENSET
5 polypeptide.

1 13. A method for the production of a pharmaceutical composition comprising

- 2 a) identifying a modulator of a GENSET polypeptide using the method of claim 11;
- 3 and
- 4 b) combining said modulator with a physiologically acceptable carrier.

5